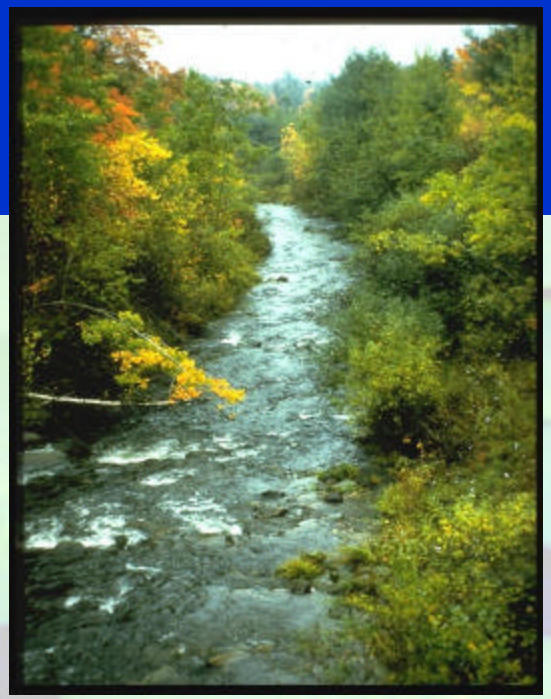
WETLAND MONITORING

Clean Water Act

- "…to restore and maintain the chemical, physical, and biological integrity of our nation's waters"
- states and tribes will report on the condition of waters of the U.S., which includes wetlands

Waters of the U.S.



National Wetland Assessment and Monitoring Strategy

- Wetland monitoring is a priority for the EPA wetlands program
- Some States and EPA have invested much effort already and plan to do more
- EPA convened a Monitoring Strategy Workgroup in Spring 2000

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Wetland Monitoring Strategy

- Build state/tribal monitoring capacity by coordinating and expanding upon existing monitoring efforts. OR
- Facilitate the development and implementation of new state and tribal wetland monitoring programs.
- Then use monitoring data to improve decision-making.

Elements of the Wetland Monitoring Strategy

- *Benefits of monitoring*
- *How EPA will help States & Tribes develop monitoring programs*
- *How States & Tribes can design and implement programs*
- *Training needs*

Benefits of Wetland Monitoring

To EPA:

Prioritize allocation of resources for wetland management and protection

- Improve CWA §404 permit review and compensatory mitigation decisions;
- Achieve requirements of CWA §305(b) and §101(a);

Benefits of Wetland Monitoring

To states and tribes:

- Identify degraded wetlands and wetland types most in need of restoration and protection;
- Improve CWA §401 water quality certification decisions;
- Report better information on the health of wetland resources to the public;
- Determine how wetland restoration will assist in achieving watershed management plan goals;
- Assist in the determination of beneficial uses
- Developing water quality standards for wetlands

State and Tribal Tasks

*Systematically assess the **chemical, physical, and biological** condition of our Nation's wetlands*

States and tribes:

- **define goals and desired products**
- **assess existing capacity**
- **identify data and resource needs**
- **prepare plan for program development, integration, and implementation**

State and Tribal Tasks

- *Set Priorities for Wetland Monitoring*
- *Develop Protocols*
- *Implement Program-*
  [Do Actual Monitoring]
- *Analyze and Report Data*
  [305(b) Reports]

Building State and Tribal Capacity

EPA will:

- **establish *regional wetland monitoring workgroups***
    - **forum for technical support**
    - **data and methods sharing**
- **provide *financial support* (Wetland Program Development Grants)**
- **provide *technical guidance* and training**

Next Steps for Workgroup

- Involve states and tribes in validating/revising strategy
- Encourage expansion of monitoring programs to include wetlands
- Encourage submission of §104(b)3 grant proposals
- Fund pilot projects in interested states/tribes
- Develop national technical guidance for wetland monitoring including on state/tribal experience

Technical Approach

Assessment and Monitoring Goals

- Identify, or measure wetland qualities (functions, benefits)
- Determine stressors to wetlands
- Determine changes to wetland condition over time
- Provide information useful in protecting and restoring wetlands

Monitoring Approach

- **WATERSHED PRIORITIZATION:** use existing methods to rank watersheds
- **LANDSCAPE ASSESSMENT:** use remote sensing and existing watershed data (GIS)
- **RAPID ASSESSMENT:** field review of land uses and stressors at wetland sites
- **INTENSIVE SITE ASSESSMENT:** field and lab methods to collect specific data
- **DATA REPORTING**: provide data for building a picture of local/national wetland health

Existing Methods

- Index of Biological Integrity (IBI), bioassessment methodology
- Hydrogeomorphic Approach (HGM), focuses on hydrologic & biogeo-chemical processes; includes habitat
- Habitat Evaluation Procedure (HEP), focuses on selected wildlife species

How Will We Know If We Don't Monitor?

"We cannot address problems about which we are not aware"

Damaged

Healthy